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Kathryn A. Kelley  
Signature of Person Mailing Paper

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of :  
Wolfgang Heimberg et al. : Group Art Unit  
Serial No. 09/869230 : Examiner  
Filed: June 25, 2001 : Confirmation No.  
For: APPARATUS FOR THE CONDUCT OF :  
CHEMICAL REACTIONS :

Assistant Commissioner for Patents  
Washington, D.C. 20231

**FURTHER SUBMISSION**

Dear Sir:

Included herewith for filing in the above noted application please find a copy of an English translation of the International Preliminary Examination Report referring to the corresponding PCT application (PCT/EP99/10022).

This translation was only recently made available by the European Patent Office.

Respectfully submitted,

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Translation

PATENT COOPERATION TREATY

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JAN 30 2002

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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Applicant's designation of the international phase WO-2135		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP99/10022	International filing date (day/month/year) 16 December 1999 (16.12.99)	Priority date (day/month/year) 30 December 1998 (30.12.98)	
International Patent Classification (IPC) or national classification and IPC B01J 19/00			
Applicant MWG - BIOTECH AG			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 7 sheets, including this cover sheet.

☒ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of 6 sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 05 July 2000 (05.07.00)	Date of completion of this report 22 February 2001 (22.02.2001)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP99/10022

## I. Basis of the report

1. This report has been drawn on the basis of (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.*):

- ☐ the international application as originally filed.
- ☒ the description, pages 6-20, as originally filed,  
 pages \_\_\_\_\_, filed with the demand,  
 pages 1-5,5a, filed with the letter of 12 January 2001 (12.01.2001),  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.
- ☒ the claims, Nos. 1-20, as originally filed,  
 Nos. \_\_\_\_\_, as amended under Article 19,  
 Nos. \_\_\_\_\_, filed with the demand,  
 Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.
- ☒ the drawings, sheets/fig 1-4, as originally filed,  
 sheets/fig \_\_\_\_\_, filed with the demand,  
 sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

3. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP99/10022

## III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 12-17

because:

☐ the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international preliminary examination (*specify*):

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. \_\_\_\_\_  
are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed.

☒ no international search report has been established for said claims Nos. 12-17

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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## IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☐ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☐ complied with.
- ☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos. \_\_\_\_\_

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP99/10022

## VI. Certain documents cited

## 1. Certain published documents (Rule 70.10)

<u>Application No. Patent No.</u>	<u>Publication date (day/month/year)</u>	<u>Filing date (day/month/year)</u>	<u>Priority date (valid claim) (day/month/year)</u>
WO-A-99/65602	23 December 1999 (23.12.1999)	15 June 1999 (15.06.1999)	16 June 1998 (16.06.1998)

## 2. Non-written disclosures (Rule 70.9)

<u>Kind of non-written disclosure</u>	<u>Date of non-written disclosure (day/month/year)</u>	<u>Date of written disclosure referring to non-written disclosure (day/month/year)</u>

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 99/10022

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box III

The originally filed Claims 13-18 and 19-21  
(insofar as they refer back to Claims 13-18) have  
not been searched owing to a lack of unity of  
invention. The new Claims 12-20 correspond to the  
original Claims 13-21.

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Box IV

- 1). Reference is made to the following documents:
- D1: WO-A-98/57181
  - D2: EP-A-164 206
  - D3: EP-A-181 491
  - D4: JP-A-62 298 599 & Patent Abstracts of Japan.

- 2). The different inventions or groups of inventions are:
- i) Claims 1-11 and 18-20 (insofar as they refer back to Claims 1-11)
  - ii) Claims 12-17 and 18-20 (insofar as they refer back to Claims 12-17).

These two inventions or groups of inventions are not so linked as to realise a single general inventive concept (PCT Rule 13.1) for the following reasons:

The general concept linking the independent Claims (1 and 8) and 12 is:

A device for carrying out chemical reactions which comprises several reaction chambers into which reagents can be fed in a metered manner.

However, this concept is known from D1, D2, D3 and D4; see D1: Claim 1; Figure 4 and D2: Claim 1; Figures 1 and 6 and D3: Claim 1; Figure 1 and D4: abstract.



## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-11, 18-20	YES
	Claims		NO
Inventive step (IS)	Claims	1-11, 18-20	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-11, 18-20	YES
	Claims		NO

## 2. Citations and explanations

- 1). The device as per Claim 1 of the application differs from that of D1 in that the device for acting on the slider engages a tension rod which extends through central openings in the slider - see D1: Fig. 3A, 4; page 9, line 22 - page 12, line 3.

The device as per Claim 1 of the application differs from that of D2, D3 or D4 in that the reaction slider comprises a large number of through-holes which serve as reaction chambers; see D2: Figures 1-6; page 4, line 2 to page 7, line 37 and D3: Figure 1; page 2, line 30 to page 5, line 2 and D4: figure; abstract. In D2, D3 and D4, the reaction slider has only one reaction chamber.

The subject matter of Claim 8 differs from the known device (D1, D2, D3 or D4) in that at least two different chemicals can be fed to one of the feed openings.

The subject matter of the current Claims 1 and 8 is therefore novel.